7th Principal Investigators Meeting Agenda

7th Principal Investigators Meeting Innovative Molecular Analysis Technologies Program September 7-8, 2006 Bethesda Marriot Hotel (Pooks Hill) Bethesda, Maryland

Agenda

THURSDAY, SEPTEMBER 7, 2006

7:30 a.m. - 8:30 a.m. **Registration and Continental Breakfast**

7:30 a.m. - 8:30 a.m. **Poster Setup**

8:30 a.m. - 8:50 a.m. Welcoming Remarks

Gregory J. Downing, D.O., Ph.D.

National Cancer Institute

8:50 a.m. - 9:50 a.m. **Keynote Presentation**

Systems Approaches to Predictive Marker Development

Joe W. Gray, Ph.D.

Lawrence Berkeley National Laboratory

9:50 a.m. - 10:00 a.m. **Break**

10:00 a.m. - 12:20 p.m. **Session 1: Sample Preparation**

Moderator: Rebecca L. Huppi, Ph.D.

National Cancer Institute

David R. Goodlett, Ph.D. (Invited)

br> University of Washington Determining Agreement in Molecular Data Across Different Methods of Tissue Procurement

Philip S. Bernard, M.D. Huntsman Cancer Institute

Recovery of Protein From Formalin-Fixed Paraffin-Embedded Tissue

Timothy O'Leary, M.D., Ph.D. Veterans Health Administration

A Chip-Based RNA Sensor Platform for Detection of Circulating Tumor Cells

Gary A. Clawson, M.D., Ph.D.

Pennsylvania State University

Microfluidic Platform for Live Cell Screening

Philip Lee, Ph.D.

CellASIC Corporation

12:20 p.m. - 1:20 p.m. **Lunch**

1:20 p.m. - 2:05 p.m. Electronic Submissions and Alternative Funding

Opportunities

SF424/Electronic Transition Requirements

Scarlett Gibb

National Institutes of Health

Alternative Funding Opportunities

Jennifer Couch, Ph.D.

National Cancer Institute

2:05 p.m. - 2:15 p.m. **Break**

2:15 p.m. - 4:15 p.m. **Session 2: Proteomics**

Moderator: Paul Wagner, Ph.D.

National Cancer Institute

Mapping Endothelium and Its Caveolae In Vivo to Improve Antibody Pentetration, Imaging, and Therapy of Solid Tumors

Jan E. Schnitzer, M.D.

Sidney Kimmel Cancer Center

Diverse Novel Approaches for Proteomics of Posttranslational Modifications

Yingming Zhao, Ph.D.

University of Texas Southwestern Medical Center

Selective Profiling of Proteins in Cancer Cells From Fine- Needle Aspirates by MALDI-TOF Mass Spectrometry

Michelle L. Reyzer, Ph.D.

Vanderbilt University

Detection and Identification of Cysteine Sulfenic Acids in

Proteins Involved in Signal Transduction Pathways

Leslie B. Poole, Ph.D.

Wake Forest University School of Medicine

Nanoparticles for Efficient Delivery to Solid Tumors

Suzie Pun, Ph.D.

University of Washington

4:15 p.m. - 5:45 p.m. **Poster Session**

FRIDAY, SEPTEMBER 8, 2006

8:00 a.m. - 9:00 a.m. Registration and Continental Breakfast

9:00 a.m. - 11:30 a.m. Session 3: Cellular Imaging

Moderator: Jennifer Couch, Ph.D.

National Cancer Institute

Identifying the Cancer Stem Cell: Lessons Learned From Hematopoiesis and Acute Leukemia

Scott W. Hiebert, Ph.D. Vanderbilt University

Automated Cell Preparation in Tubes for 3D Microscopy

Mark R. Holl, Ph.D.

University of Washington

Imaging Transcriptional Activation in Gliomas

E. Antonio Chiocca, M.D., Ph.D.

James Cancer Hospital and Solove Research Institute

Sensing and Imaging Activated Fibroblast in Tumor Stroma

Ching Tung, Ph.D.

Massachusetts General Hospital/Harvard Medical School

Age-Dependent Accumulation of Recombinant Cells in the Mouse Pancreas Revealed In Situ by Fluorescence Imaging

Bevin Engleward, Ph.D.

Massachusetts Institute of Technology

11:30 a.m. - 12:30 p.m. **Lunch**

12:30 p.m. - 2:30 p.m.

Session 4: Molecular Biology

Moderator: J. Randy Knowlton, Ph.D.

National Cancer Institute

Development of High-Throughput Methods for the *in vitro* Selection of RNA Aptamers That Can Distinguish Between Tumor Cell Types

Andrew D. Ellington, Ph.D. University of Texas at Austin

Facile Characterization of Protein Structure/Function With Enhanced Peptide Amide Hydrogen/Deuterium Exchange Mass Spectrometry (DXMS)

Virgil L. Woods, Jr., M.D.

University of California, San Diego

Analysis of Genetic and Epigenetic Alterations in DNA Archives Generated From Tumors of the Head and Neck

Paul M. Lizardi, Ph.D.

Yale University School of Medicine

Prostate Cancer Gene Discovery Using Transposon-Based Somatic Mutagenesis

Lara S. Collier, Ph.D.

University of Minnesota Cancer Center

Solid-Phase Assays of Oncogenic Tyrosine Kinase Activity for Use in Diagnostics and Drug Discovery

Stephen J. Kron, M.D., Ph.D.

University of Chicago

2:30 p.m. - 3:00 p.m.

Closing Remarks

3:00 p.m.

Adjournment and Poster Removal